

## Product Datasheet - Technical Specifications



More information in our Web-Shop at ► [www.meilhaus.com](http://www.meilhaus.com)

### Your contact

Technical and commercial sales, price information,  
quotations, demo/test equipment, consulting:

Tel.: +49 - (0)81 41 - 52 71-0

E-Mail: [sales@meilhaus.com](mailto:sales@meilhaus.com)

**Meilhaus Electronic GmbH**  
Am Sonnenlicht 2  
82239 Alling/Germany

Tel. +49 - (0)81 41 - 52 71-0 E-  
Mail [sales@meilhaus.com](mailto:sales@meilhaus.com)

Mentioned company and product names may be registered trademarks of the respective companies. Errors and omissions excepted. © Meilhaus Electronic.

# HM-TP42-3AQF/W-Pocket2

## Pocket Thermography Camera



HIKMICRO Pocket Series is equipped with a high-resolution HIKMICRO VOx detector, an 8 MP optical camera, and a 3.5" LCD touch screen. It helps you quickly and efficiently locate the hidden problems and accurately measure abnormal temperature. The wide temperature range of  $-20^{\circ}\text{C}$  to  $400^{\circ}\text{C}$  is ideal for building inspection, HVAC, electrical, and mechanical equipment maintenance. The 25 Hz frame rate keeps up with fast inspections, and the Wi-Fi function allows the Pocket to share images in real time. The Pocket Series is a powerful thermography tool in your pocket, so it is always there whenever you need it.

### Key Features

- Thermal resolution:  $256 \times 192$  (49,152 pixels), NETD:  $< 40 \text{ mK}$  (@  $25^{\circ}\text{C}$ ,  $F\# = 1.0$ )
- Accurately measure temperature from  $-20^{\circ}\text{C}$  to  $400^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $752^{\circ}\text{F}$ )
- Accuracy: Max. ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ ,  $\pm 2\%$ )
- 25 Hz image frequency
- Thermal, fusion, PIP, and optical modes, 8 MP Optical camera
- Manual, automatic, and 1-Tap level and span
- High temperature alarm
- Built-in 16 GB memory
- LED work light
- 1.0x to 4.0x continuous digital zoom
- Up to 4 hours continuous running

## Specification

THERMAL MODULE	
IR RESOLUTION	256 × 192 (49, 152 pixels)
SPECTRAL RANGE	8 to 14 μm
NETD	< 0.04°C (40 mK) at 25°C (77°F) ambient temperature, F# = 1.0
FOCAL LENGTH	3.5 mm
FOCUS	Fixed
FOV (FIELD OF VIEW)	50° H × 37.2° V
IFOV (SPATIAL RESOLUTION)	3.43 mrad
IMAGE FREQUENCY	25 Hz
MIN. FOCUSING DISTANCE	0.3 m (0.98 ft)
DETECTOR TYPE	Vanadium Oxide Uncooled Focal Plane Array
DETECTOR PITCH	12 μm
F-NUMBER	F1.1
OPTICAL MODULE	
FOV (FIELD OF VIEW)	64.6° H × 51.5° V
PICTURE RESOLUTION	Configurable: 2 MP, 5 MP, 8 MP
VIDEO RESOLUTION	640 × 480
FOCUS	Fixed
BUILT-IN VISUAL CAMERA	3264 × 2448 (8 MP)
IMAGE DISPLAY	
LEVEL/ SPAN	Auto/Manual/1-Tap Touch-screen
DISPLAY	640 × 480 Resolution, 3.5" LCD Touch Screen
IMAGE MODES	Thermal/Optical/Fusion/PIP
COLOR PALETTES	7: White Hot, Black Hot, Rainbow, Ironbow, Red Hot, Fusion, Rain
FUSION	Thermal image with visual camera details
DIGITAL ZOOM	1.0x to 4.0x continuous
PIP	Resizable and movable infrared area on the visual image
SCREEN BRIGHTNESS	Manual adjustment
MINIMUM TEMP SPAN (MANUAL)	2°C (3.6°F)
MEASUREMENT AND ANALYSIS	
OBJECT TEMPERATURE RANGE	-20°C to 400°C ( -4°F to 752°F )

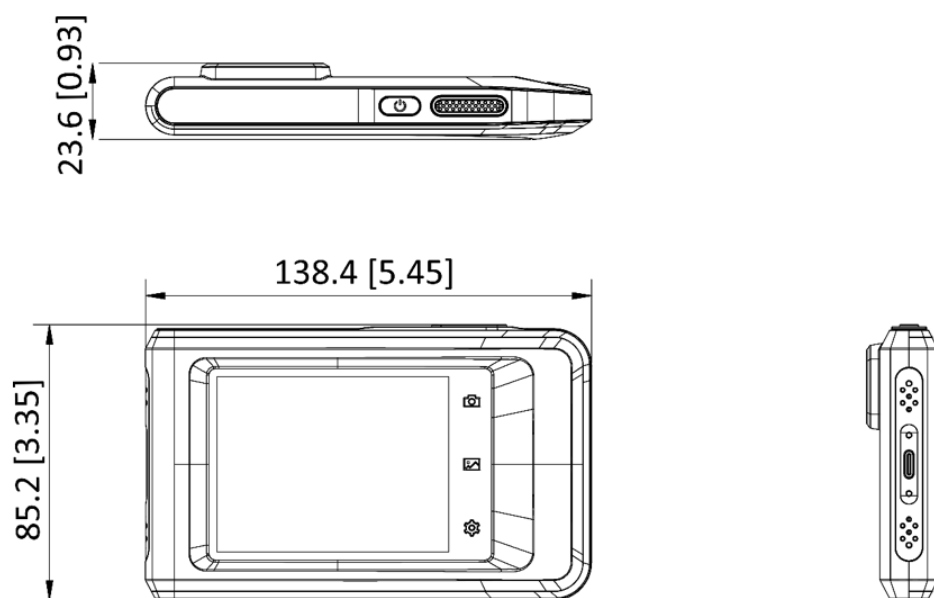
ACCURACY	Max. ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ , $\pm 2\%$ ), for ambient temperature from $15^{\circ}\text{C}$ to $35^{\circ}\text{C}$ ( $59^{\circ}\text{F}$ to $95^{\circ}\text{F}$ ) and object temperature above $0^{\circ}\text{C}$ ( $32^{\circ}\text{F}$ )
MEASUREMENT PRESETS	Center Spot, Hot Spot, Cold Spot, Off
HIGH TEMPERATURE ALARM	Audible/visual alarm of above temperature threshold, user-defined temperature threshold
ON-CAMERA EMISSIVITY CORRECTION	Variable from 0.01 to 1.0 or selected from the materials list
ON-CAMERA REFLECTED TEMPERATURE COMPENSATION	Automatic, based on the input of the reflected temperature
ON-CAMERA TRANSMISSION CORRECTION	Automatic, based on the inputs for distance and humidity
<b>STORAGE</b>	
STORAGE MEDIA	Built-in EMMC (16 GB)
IMAGE STORAGE CAPACITY	Approx. 60,000 images
IMAGE FILE FORMAT	Radiometric.JPEG with measurement data included Thermal.THM.JPEG without measurement data included
VIDEO STORAGE CAPACITY	Approx. 10 h
VIDEO FILE FORMAT	Standard MP4 non-radiometric video
TEXT NOTE	Max. 200 Characters
<b>POWER SYSTEM</b>	
POWER SUPPLY	5 VDC/2 A (Charging via USB), fast charging
POWER CONSUMPTION	1.92 W
BATTERY TYPE	Rechargeable Li-ion battery
BATTERY OPERATING TIME	4 hours continuous running per battery (actual life varies depending on settings and usage)
BATTERY CHARGING TIME	1.5 h to 94%, 2.5h to full charge
BATTERY CHARGING SYSTEM	In-imager charging, fast charging
AC OPERATION	AC operation with included power supply (100 VAC to 240 VAC, 50/60 Hz)
<b>GENERAL</b>	
WI-FI	802.11 b/g/n (2.4 GHz, 5 GHz)
BLUETOOTH	Bluetooth 4.2
USB INTERFACE	USB 2.0, USB Type-C
LED LIGHT (TORCH)	Yes
MICROPHONE	Yes
BUZZER	Yes, audible alarm of above temperature threshold
CARRYING POUCH	Yes
WARRANTY	3 years for whole product, 10 years for detector, and 2 years for battery

RECOMMENDED CALIBRATION CYCLE	1 year (Assumes normal operation and normal aging)
SAFETY	IEC 62368-1: Overvoltage category II, Pollution Degree 2
LANGUAGE	21 Languages English, German, French, Spanish (Spain), Portuguese (Portugal), Italian, Czech, Slovak, Polish, Hungarian, Romanian, Dutch, Danish, Norwegian, Finnish, Swedish, Russian, Turkish, Japanese, Korean, Chinese (Traditional)
WORKING TEMPERATURE RANGE	-10°C to 50°C (14°F to 122°F)
PROTECTION LEVEL	IP54 (protected against dust, limited ingress; protection against water spray from all directions)
DROP TEST HEIGHT	2 m (6.56 ft)
WEIGHT	Approx. 218 g (0.481 lb)
DIMENSION	138.5 mm × 85.2 mm × 23.6 mm (5.45" × 3.35" × 0.93")
STORAGE TEMPERATURE RANGE	-20°C to 60°C (-4°F to 140°F)
TRIPOD MOUNTING	UNC ¼" -20
RELATIVE HUMIDITY	< 95% non-condensing
ELECTROMAGNETIC COMPATIBILITY	EN55032: 2015+A11: 2020 EN50130-4: 2011+A1: 2014 EN61000-3-3: 2013
AUSTRALIAN RCM	EN 61010-1: 2010 EN55032: 2015+A11: 2020 EN50130-4: 2011+A1: 2014 EN61000-3-3: 2013
US FCC	CFR 47, Part 15 Subpart B
ROHS COMPLIANT	Yes
VIBRATION	0.03 g2/Hz (3.8 g), 2.5 g IEC 60068-2-6
SHOCK	25 g, IEC 68-2-29
<b>SOFTWARE</b>	
PC SOFTWARE	HIKMICRO Analyzer
APP	HIKMICRO Viewer App
CAST SCREEN	UVC Alarm Client

## Available Model

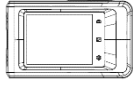
HM-TP42-3AQF/W-Pocket2

## Dimension

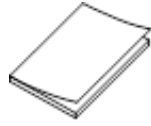


Unit: mm [inch]

## Packing List



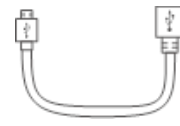
Camera (× 1)



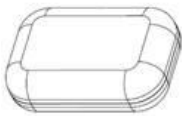
Quick Start Guide (× 1)



Power Supply (× 1)



USB Cable (× 1)



Carrying Pouch (× 1)



Wrist Strap (× 1)

COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.